

AMENDMENTS TO THE SPECIFICATION

Page 4, lines 17-23 - Description of the Invention:

The present invention is based on the insight that commensal *Actinomyces* and *Streptococcus* species transform acidic PRPs to small-size peptides, such as pentapeptides. These small-size peptides are transformed into ammonia by the action of certain oral bacteria. The ammonia thus formed protects raises the pH at the dental surface and ~~therby~~ thereby protects the surface against caries.

Page 7, lines 23-27:

Also preferred is a penta- to decapeptide comprised by the sequence of amino acid 99 to amino acid 115 of the 150 residue PRP-1 protein:

GlyGlyHisProArgProProArgGlyArgProGlnGlyProProGlnGln, SEQ ID No. 13, with the proviso provisio that it contains two or more Arg.

Page 7, line 29 through page 8, line 8:

Also preferred are the following peptides:

ArgGlyArgProGln (residues 106-110) SEQ ID No. 1;

ArgGlyArgProGlnGly (residues 106-111) SEQ ID No. 2;

ArgGlyArgProGlnGlyPro (residues 106-112) SEQ ID No. 3;

ArgGlyArgProGlnGlyProPro (residues 106-113) SEQ ID No. 4;

ArgGlyArgProGlnGlyProProGln (residues 106-114) SEQ ID No. 5;

ArgGlyArgProGlnGlyProProGlnGln (residues 106-115) SEQ ID No. 6;

GlyGlyHisProArgProProArgGlyArg (residues 99-108) SEQ ID No. 7;

GlyHisProArgProProArgGlyArg (residues 100-108) SEQ ID No. 8;

HisProArgProProArgGlyArg (residues 101-108) SEQ ID No. 9;
ProArgProProArgGlyArg (residues 102-108) SEQ ID No. 10;
ArgProProArgGlyArg (residues 103-108) SEQ ID No. 11;
ProProArgGlyArg (residues 104-108) SEQ ID No. 12.

Insert on page 8, the following paragraph between lines 9 and 10:

Common to SEQ ID Nos. 1-13 is the sequence ProArgGlyArg.

Page 8, lines 22-26:

Also preferred for use in the method of preventing dental caries is a penta- to decapeptide comprised by the sequence of amino acid 99 to amino acid 115 of the 150 residue PRP-1 protein: GlyGlyHisProArgProProArgGlyArgProGlnGlyProProGlnGln, SEQ ID No. 13,

with the privisie proviso that it contains two or more Arg.

Page 8, line 28 through page 9, line 9:

Also preferred for use of preventing dental caries are the following peptides:

ArgGlyArgProGln (residues 106-110) SEQ ID No. 1;
ArgGlyArgProGlnGly (residues 106-111) SEQ ID No. 2;
ArgGlyArgProGlnGlyPro (residues 106-112) SEQ ID No. 3;
ArgGlyArgProGlnGlyProPro (residues 106-113) SEQ ID No. 4;
ArgGlyArgProGlnGlyProProGln (residues 106-114) SEQ ID No. 5;
ArgGlyArgProGlnGlyProProGlnGln (residues 106-115) SEQ ID No. 6;
GlyGlyHisProArgProProArgGlyArg (residues 99-108) SEQ ID No. 7;
GlyHisProArgProProArgGlyArg (residues 100-108) SEQ ID No. 8;

HisProArgProProArgGlyArg (residues 101-108) SEQ ID No. 9;
ProArgProProArgGlyArg (residues 102-108) SEQ ID No. 10;
ArgProProArgGlyArg (residues 103-108) SEQ ID No. 11;
ProProArgGlyArg (residues 104-108) SEQ ID No. 12.

Page 9, lines 10 - 18:

According to the invention is disclosed a composition for preventing dental caries comprising a prevention-effective amount of an oligopeptide comprising two arginine residues selected from the group consisting of pentapeptide, hexapeptide, heptapeptide, octapeptide, nonapeptide and decapeptide, and a suitable carrier. Particularly preferred is the pentapeptide ArgGlyArgProGln, SEQ ID No. 1. Suitable carriers include state-of-the-art toothpaste and mouthwash compositions but also chewing-gums, lozenges, and the like.

Page 9, lines 20 - 25:

Also preferred for use in the composition for preventing dental caries is a penta- to decapeptide comprised by the sequence of amino acid 99 to amino acid 115 of the 150 residue PRP-1 protein: GlyGlyHisProArgProProArgGlyArgProGlnGlyProProGlnGln, SEQ ID No. 13, with the provisio proviso that it contains two or more Arg.

Page 9, line 27 through page 10, line 6:

Also preferred for use in the composition for preventing dental caries are the following peptides:

ArgGlyArgProGln (residues 106-110) SEQ ID No. 1;
ArgGlyArgProGlnGly (residues 106-111) SEQ ID No. 2;
ArgGlyArgProGlnGlyPro (residues 106-112) SEQ ID No. 3;

ArgGlyArgProGlnGlyProPro (residues 106-113) SEQ ID No. 4;
ArgGlyArgProGlnGlyProProGln (residues 106-114) SEQ ID No. 5;
ArgGlyArgProGlnGlyProProGlnGln (residues 106-115) SEQ ID No. 6;
GlyGlyHisProArgProProArgGlyArg (residues 99-108) SEQ ID No. 7;
GlyHisProArgProProArgGlyArg (residues 100-108) SEQ ID No. 8;
HisProArgProProArgGlyArg (residues 101-108) SEQ ID No. 9;
ProArgProProArgGlyArg (residues 102-108) SEQ ID No. 10;
ArgProProArgGlyArg (residues 103-108) SEQ ID No. 11;
ProProArgGlyArg (residues 104-108) SEQ ID No. 12.

Page 18, line 29 through page 19, line 3:

EXAMPLE 15. Lozenge. A solution of ArgGlyArgProGln (SEQ ID No. 1) 'acetate' was prepared by dissolving ArgGlyArgProGln in water and adding acetic acid to pH 6.5. The aqueous solution was freeze-dried and the powder thereby obtained mixed with 150 g of polyethylene glycol 8000, 150 g of microcrystalline cellulose, 600 g of mannitol, 10 g of stearic acid are milled to pass a 40 mesh sieve. The mixture is fed to a tablet press to produce 1 g tablets.

Page 19, lines 5 - 15:

EXAMPLE 16. Chewable tablet. 900 g mannitol and 5 g sodium saccharin are screened through a 40-mesh screen and blended thoroughly with 40 g ArgGlyArgProGln acetate (SEQ ID No. 1 acetate) prepared as described above. A binder solution of 20 g of acacia and 50 g of gelatin in 500 ml water was prepared separately. The powder was wet granulated using 200 ml of binder solution for 1000 powder. After drying overnight at 75°C the granules were screened through a 12 mesh screen, mixed with 1 g of peppermint oil adsorbed on 3 g of colloidal silica and 25 g magnesium stearate. From this mixture 1 g tablets were compressed to a hardness of 12 kg.